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**RESEARCH ARTICLE**

# The Implementation of 2013 Curriculum in Mathematics Learning at SMA Muhammadiyah 3 Tangerang

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## ABSTRACT

The objectives in this study are 1) Describe the implementation of the 2013 curriculum in mathematics learning, 2) Formulate what factors support and hinder the implementation of the 2013 curriculum. This study is a type of qualitative research using a descriptive approach. The study subjects were mathematics teachers who taught in class X of SMA Muhammadiyah 3 in Tangerang City. Data collection techniques used are in-depth interviews, observation, documentation. Technical data analysis is done by reducing, presenting data, and verification. The results showed that the X grade mathematics teacher in implementing the 2013 curriculum was still lacking. This can be seen by teachers not compiling RPPs based on the 2013 curriculum. As a result, the learning process is not in accordance with the demands according to 2013 curriculum references. Factors that prevent teachers from implementing the 2013 curriculum are teachers who have not attended 2013 curriculum training, teachers have not joined and are taking part in routine activities in the city high school MGMP routine Tangerang, schools have not facilitated 2013 curriculum training activities and the lack of existing infrastructure in the school environment to support the implementation of the 2013 curriculum.



## 1. INTRODUCTION

Education is one indicator to determine whether a nation is progressing or not (Afandi, 2018; Ahid, 2006; Amalia, 2018; Masitoh, 2018). This is because education is the main point in the development of a country in managing or planning the country's life in the future. The education process is an activity to develop the resources owned by a nation (Anwar, 2014; Sofyan, 2016; Setiadi, 2016). To arrange for an education in a country to be carried out well so that the educational process is evenly distributed in all regions of the country requires an educational reference, which is often referred to as the curriculum. Curriculum and education are like two sides of a coin that cannot be separated (Maharani, 2019; Anwar, 2014; Setiadi, 2016). The curriculum has a strategic position because, in general, the curriculum is a description of the vision, mission, and educational goals of a nation (Morelent, 2015; Yuliani, 2018). This also positions the curriculum as the central content of values that will be transformed into students. The curriculum aims to put the standards that must be implemented at every level of education in implementing learning so that there is no overlap between each level of education.

Etymologically, the curriculum originates from the Greek language courier, which means runner and curare, which means a race place; the curriculum originates from Greek sports that is as a distance that must be traveled by a runner from start to finish. So it can be interpreted that the curriculum is a unit or parts that must be achieved by students so that later they will eventually obtain a diploma. Bahri (2011) states that the curriculum is a set of learning plans consisting of content and subject matter that are structured, programmed, and well planned related to various activities and social interactions in the environment in organizing teaching and learning activities with the aim of achieving educational goals. In a broader meaning, the curriculum is a collection of a set of values designed to be transformed into students' subjects, both values in the form of cognitive, affective and psychomotor. by obtaining a set of values, the mindset and behavior of students will be formed in accordance with the directions and goals that have been previously formulated.

This rapid development of the times must be accompanied by curriculum development. It aims to ensure that education carried out by a country can accommodate the needs of the future. According to Ahid (2006), the concept of the curriculum must develop in line with the development of educational theories and practices, also varying according to the flow or theory of education that is adopted. There are three concepts about curriculum, curriculum as substance, curriculum as a system, and curriculum as a field of study.

The government as a policy holder must be able to provide a curriculum that is in line with the needs and developments of the times. The development of the Indonesian curriculum since its inception has undergone 13 changes. In developing the 2013 curriculum there are several reasons that form the basis of

development by the government. In his presentation, Deputy Minister of Education and Culture R.I Education Sector (2014) stated that there were several reasons that became the basis for curriculum development, namely future challenges, future competencies, community perceptions, knowledge development and pedagogy, negative phenomena that emerged.

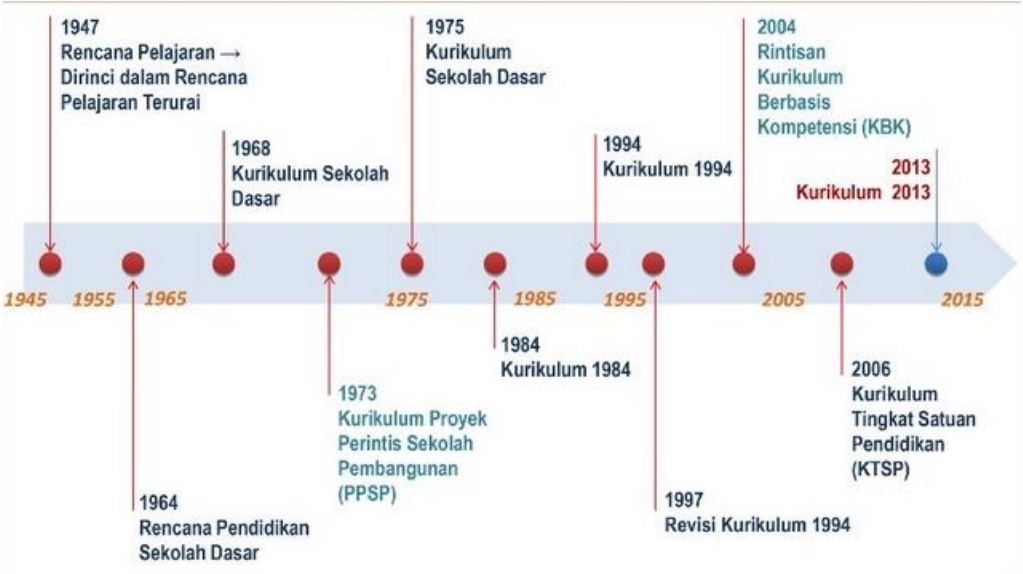


**Figure 1**. History of Curriculum Development in Indonesia

Based on the basis of developing the 2013 curriculum, it can be seen that the theme or purpose of developing and implementing the 2013 curriculum is to create Indonesian human resources who are able to think creatively, critically, productively, improve the character of the nation, develop an attitude of curiosity through scientific learning and also want to improve rankings. Indonesia in Trends in International Mathematics and Science Study (TIMSS) and the Program for International Student Assessment (PISA). Indonesia's rank in TIMSS in 2015 for Indonesian science was ranked 45 out of 48 countries with a score of 397. Then in mathematics, Indonesia ranked 45 out of 50 countries with a score of 397. While in PISA, Indonesia's rank was 64 out of 72 countries. According to Mastur (2017) states that the theme of renewal and improvement of the 2013 curriculum is to create Indonesian people who are able to think creatively, productively, innovatively, proactively, and affective through developing attitudes (know why), skills (knowing about what) integrally. This integration is an effort to improve Indonesia's ranking in TIMSS and PISA.

The 13 curriculum exchanges, the most recent was the 2013 curriculum that came to replace the previous curriculum, the Education Unit Level Curriculum (KTSP). The 2013 curriculum is a refinement of the SBC curriculum, which includes three competencies, namely attitude competence, knowledge, and skills. According to Permendikbud No. 104 of 2014, which contains an assessment of learning outcomes by educators at the level of primary and secondary education is an authentic assessment in the form of an assessment that requires students to show attitude, in using the knowledge and skills gained in the learning process.

The learning in the 2013 curriculum further emphasizes the learning process of scientific learning that includes Observing, Questioning, Associating, Experimenting (trying), Creating Networking. According to Kurniasih (2014: 132), the emphasis of the 2013 curriculum is to make students or students have better abilities in carrying out activities: observing, asking, reasoning, communicating, or presenting what they get or know after they have done the learning process.

The implementation of the 2013 curriculum was not comprehensive; this also happened in Tangerang City, where not all schools implemented the 2013 curriculum. Particularly at the Muhammadiyah 3 Senior High School in Tangerang, the schools implementing the 2013 curriculum were class X and class XI, while class XII still applied the KTSP curriculum.

## 2. METHODS

The approach used in this research is a qualitative approach with a descriptive research design. The descriptive qualitative study aims to describe an outcome in accordance with the actual situation. According to Moleong (2007: 4), qualitative research is research that produces descriptive data in the form of words written or spoken from people and observable behavior, this approach is directed at the background of the individual as a whole. Then according to Sugiono (2009) qualitative research is a research method based on the philosophy of postpositivism, used to examine the natural conditions of objects, where research is as a key instrument, sampling and data sources are done by snowball, data collection techniques with triangulation, data analysis in the form of inductive/qualitative.

Data collection techniques carried out by interview, in-depth observation, and documentation. The data collected was analyzed using descriptive data analysis, which was carried out continuously, which included activities to reduce data, present data, and conclude (data verification). Data analysis in this research was carried out at the time of data collection, and after the data collection was completed, according to Sugiono (2009), data analysis had begun since formulating and explaining the problem, before it dropped out and continued until writing the results of the research. This research was conducted at SMA Muhammadiyah 3 Kota Tangerang, subjects in this study were mathematics teachers and students of class X Natural Sciences and Natural Sciences XI. The focus in this study is directed at how the implementation of the 2013 curriculum in mathematics learning, as seen from the stages of the implementation of learning that has been done in class.

## 3. RESULTS AND DISCUSSION

The 2013 curriculum is a replacement curriculum issued by the government to replace the 2006 curriculum or what is often referred to as the Education Unit Level Curriculum (KTSP). From the initial implementation of the 2013 curriculum, it has been running for four years, but in the implementation, not all schools have implemented it thoroughly, including in SMA Muhammadiyah 3 Kota Tangerang. SMA Muhammadiyah 3 Tangerang has only been implementing the 2013 curriculum for two years, namely from 2017, so from the X, XI, and XII levels, only X and XI classes have already implemented the 2013 curriculum. For class XII, the KTSP curriculum is still implemented.

SMA Muhammadiyah 3 Tangerang has one mathematics teacher to teach from class X to class XII. For resources owned by the SMA Muhammadiyah 3, it can already be said to be good, because the mathematics teacher is a graduate of the Masters in mathematics education, so it can be concluded that the teacher already has a good ability to carry out learning well. From observations made to mathematics teachers during the 4x meetings in the implementation of learning that teachers have done the opening activities, core, and closing activities.

At the opening activities of learning, the teacher can master the students to condition the learning activities well. The teacher has conducted activities to remind students of the learning objectives and remind students of the previous material. Then the teacher divides students into groups, and group learning was one of the curriculum learning in 2013. At the core activities, the teacher has implemented activities or stages of scientific learning with the activities, namely observing, questioning *(asking),* associating *(reasoning),* experimenting *(trying),* creating networking has been implemented well by the teacher. This can be seen from observations made. Based on the the observation sheet carried out, it can be concluded that for the initial activities or the opening of the teacher has already carried out 100%, the core activities of 95% carried out well and for the closing activities 100%.

Based on the results of interviews with the principal and teachers, it is known that the school's Readiness in implementing the 2013 Curriculum is very good. From the informants said that the school has prepared every supporting facility in each class that carries out the 2013 curriculum, starting from the projectors that have been prepared in each classroom, learning media that have been provided by schools, handbooks for students and teachers have also been provided by the school. The implementation of the 2013 curriculum in teacher learning compiles a Learning Implementation Plan (RPP). In the preparation of the RPP, the teacher includes aspects of the 2013 curriculum, which are observing, asking questions, gathering information, and associating and communicating it. This activity is well suited to the abilities that must be developed in mathematics learning, such as the ability to reason, problem-solving, and mathematical communication.

Based on the results of research conducted at SMA Muhammadiyah 3 Kota Tangerang it is known that the implementation of the 2013 curriculum has received good responses from school principals, teachers and students. From interviews with teachers, it is known that 2013 curriculum learning which has aspects of observing, asking, gathering information and communicating it combined with learning models or other learning techniques, makes students more motivated in learning. This makes students more active in the learning process so that the teacher's role is only to be a student facilitator in the learning process. The thing in learning teachers also use learning media that makes students more interested in the learning process.

Some supporting factors in the implementation of the 2013 curriculum at SMA Muhammadiyah 3 Tangerang City include the facilities or facilities that have been provided by the school properly, ranging from supporting facilities in class, comfort class, projectors, internet network are well available, then learning facilities such as books handle students and kuru, learning media have also been provided by the school. However, there are several factors that hamper the implementation of the 2013 curriculum, including among them teachers still lacking counseling or advocacy on how to implement the 2013 curriculum well, so training for teachers needs to be increased again.

## 4. CONCLUSION

Based on the results of research that has been done it can be concluded that:

1. Implementation of 2013 Curriculum at SMA Muhammadiyah 3 Tangerang, has been well implemented, the teacher has prepared learning by making lesson plans in accordance with aspects of learning in the 2013 curriculum. Then the teacher has also combined scientific learning with other learning techniques, so that the learning process is more varies.
2. Supporting facilities at the school are well available, namely comfortable classrooms, projectors (infocus), internet networks, learning media and student and teacher handbooks have been provided by the school.
3. Learning of Curriculum 2013 implemented has been able to make students more active and the role of the teacher as a facilitator can run well.
4. Support from school principals, curriculum representatives, teachers and all education practitioners in the school gave a good response to the implementation of the 2013 curriculum.

Based on the research results, the suggestion that the researcher can give is for the better implementation of the 2013 curriculum, schools always provide more maximum support, such as sending more teachers to attend seminates or workshops related to the implementation of the 2013 curriculum.

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